

ABSTRACT

An interlocking assembly of a voice coil motor for a hard disk drive having an arcuate shaped hollow structure formed by metal injection molding. The hollow structure has a bottom plate member that is separated from a top plate member by a pair of upright members disposed therebetween. The upright members joined with the inside surfaces of the plate members. The uprights are disposed at each end of the hollow structure. A tapered recess is formed in the top surface of the bottom plate, the recess ingress's from a convex edge of the bottom plate and narrows while extending through to an opposite concave edge, the tapered recess has side edges shaped to tightly interlock with a flat arcuate shaped permanent magnet having dovetail side edges to slidely interlock with the tapered recess of the bottom plate of the hollow structure, thus eliminating the need for adhesive fastening.